Leaders

Snowboarding injuries

Since the inception of the idea of riding a board on the snow in the 1970s, the popularity of the winter sport of snowboarding has burgeoned. Snowboarding is the only area of the winter sports market that has continued to grow. The 1994–1995 NSAA Kottke National Business Survey indicated that 14% of the 54 million area visits in the United States were generated by snowboarders.[1] It has been reported that 80% of children who participate in snow sports have ridden snowboards by their 12th birthday.[2] Industry analysts project that by the early 2000s more than 40% of those on the slopes will be snowboarders.

With the rise in popularity of snowboarding there has been a change in the injury pattern of these winter sports participants as compared with skiing. There has also been the recognition of an ankle injury that is specific to and only occurs in snowboarding. Along with a number of other medical facilities in Colorado, our clinic participated in a 10 year survey of snowboarding injuries (1988–1999). A total of 7430 snowboarding related injuries were seen in 7051 patients; 74.1% of those injured were male and 25.9% were female. Of the injured snowboarders, 45.2% were beginners, 31.4% intermediate, and 23.4% expert. There were significantly more upper extremity injuries than with skiing, which accounted for 49.1% of all injuries.

Ankle injuries accounted for 12% of all injuries, and fractures of the lateral process of the talus fractures accounted for 3%. Lateral process fractures, or snowboarder's talus fractures, are problematic and continue to be underdiagnosed and under-reported. Any acute and/or persistent anterolateral ankle pain in a snowboarder should be considered a talus fracture until proven otherwise. Most of these fractures are not able to be diagnosed by plain radiographs and require computed tomography imaging for definitive diagnosis. Most snowboarder's talus fractures need operative treatment with excision of fracture fragments or internal fixation of the fractures.

With the continued growth of snowboarding it will be increasingly more important for practitioners to be familiar with the diagnosis and treatment of snowboarding injuries. The studies have resulted in identifying and defining of a spectrum of injuries different from those of alpine skiing. Now that the spectrum of snowboarding injuries has been identified, the challenge will not only be the appropriate treatment of such injuries but also education about, research into, and prevention of such injuries. This will not only be the responsibility of the health care provider but also that of manufacturers, ski area owners and developers, snowboard shops, as well as snowboarders themselves.

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"You don't have to . . .": walking to a healthier nation

One of the best pieces of public health news in recent years has been that you do not have to be a marathon runner, sports champion, or even regular jogger to derive substantial health benefits through exercise: regular moderate physical activity has cardioprotective and other health benefits.[1] From this and our low levels of exercise as a population, it can reasonably be concluded that promoting regular moderate physical activity—active living—is not only the most feasible route for exercise promotion but also the one that will yield the largest population health gain.[2]

HEBS (the Health Education Board for Scotland) has been something of a pioneer of the active living approach in the United Kingdom.[2–4] We place a strong emphasis on walking because of its accessibility. Walking is easy for most people to contemplate and do, regardless of age or fitness level. It does not require special skills, expensive equipment, or facilities. It can be built into everyday life—for example, in commuting, shopping, and leisure. And the risk of injury is generally low.[5] HEBS commissioned qualitative research conducted in 1995 supported this notion of accessibility, with preference being shown for walking over swimming or dancing. The same research, however, suggested that walking was not generally viewed as "real" exercise, there being a belief that to be beneficial exercise has to make people sweaty and out of breath. Also, there were negative "non-aspirational" perceptions of walking, including (older) age profile, low status as a form of transport, and a boring image. Further developmental research pointed to the value of giving people "surprising" information about the value of walking.

A few years on, if you ask people what they think of when they hear of "HEBS", their answer will probably include the name "Gavin". They are referring to the TV advertising campaign that arose from the developmental research. Paradoxically using a sporting hero to promote regular moderate activity, the advertisement features Gavin Hastings comparing walking a mile with energy equivalent amounts of vigorous exercise. He points out that "you don't have to" take part in sweaty, frenetic, or very demanding forms of exercise to gain health and fitness benefits; in essence you can walk to good health. In the first phase of running the advert on TV, it was backed up by a special telephone helpline offering a pack containing the HEBS self help guide *Hassle free exercise* and information on local level physical activity facilities and contacts.

Formal evaluation of the first phase of the campaign is reported in detail elsewhere.[6] Campaign awareness and walking related knowledge and beliefs were monitored through adult population surveys. Self reported changes in physical activity levels were assessed through a panel study involving a sample (initially 700) drawn from the 4036 people who had called the helpline during its first six weeks. A composite measure of "stage of change" (precontemplation, contemplation, preparation, action, maintenance) was derived from information provided by helpline callers at baseline and follow up.[7] The rate of successful follow up at one year in the panel study was 58%. The sociodemographic profile of respondents at one year was similar to that at baseline, except for a slightly higher attrition rate for younger people.

Campaign awareness was highest in the primary target group (socioeconomic groups C2DE). There was before/after evidence of an impact on the general adult population's knowledge and beliefs about walking as a form of exercise, the biggest increase being in knowledge of exercise equivalence information specific to the campaign. This is evidence of success of the major campaign objective of "repositioning" walking in the minds of the public. Also, in the panel study there was a discernible shift in stage of change (in the right direction) between baseline and follow up. Furthermore, 48% of the helpline callers successfully contacted at one year reported being more active.

The panel study of helpline callers was of course potentially open to initial self selection bias, and to subsequent drop out and "desire to please" bias. Suppose for the sake of argument that almost 2000 people (48% of 4036) were motivated and helped to become more active through the advertisement and helpline. Even in the absence of any such effect on people who viewed the advert but did not call the helpline—and disregarding the important informing and agenda setting roles of the campaign—this would be a worthwhile outcome and indeed would represent good value for money. However, this amount of behavioural change would not be detectable even in a fairly substantial survey of the general population. In evaluation we therefore need to tap into "captive populations" (such as helpline callers) where they exist, and to manage potential bias through study design and analysis.

In any case, *Gavin*, with repeated showings, has undoubtedly caught the attention of the people of Scotland. Awareness of the advertisement in the adult general population runs consistently at around 90%, and I have referred to its centrality to people's awareness of HEBS. In 1997 *Gavin* was voted favourite advertisement in a readers' poll conducted by *The Scottish Sun* as part of the Scottish Advertising Awards. This is no mean feat, and its significance in evaluation terms should not be underestimated. It is evidence that health education advertising can have a wide appeal and become part of the fabric of the nation, more than holding its own with more expensive and less socially useful advertising.

The campaign and other health education efforts—in schools, through the workplace and health service, and in other settings—are of course but pieces in a jigsaw of factors affecting the nation's levels of activity. Policies and action in areas such as community safety, transport, pollution control, urban and rural planning, and access to facilities are needed to make it more appealing and more feasible for people to build physical activity into their everyday lives at all stages and ages.

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Role of exercise counselling in health promotion

Despite the clear health benefits that can be attained through adopting a more active lifestyle, most adults in the United Kingdom as well as other industrial nations remain underactive. Faced with this epidemic, there is a growing need for physical activity interventions that can be widely disseminated to all segments of the population across the lifespan.

One promising avenue for physical activity counselling and support lies with the primary care doctor and other health care professionals. The strengths of incorporating physical activity advice and support as part of routine health care include the ability to reach a substantial portion of the population repeatedly over time, the consistency and continuity of message content and delivery, and the willingness among patients to act on their doctor's advice.[1 2] Despite these strengths, however, a number of barriers to physical activity counselling in primary care have been documented, including lack of time, reimbursement, and training in physical activity or behaviour change counselling.[3] Although such barriers present continuing challenges to the health promotion and health care fields, the potential public health impact that primary care settings can have on health behaviour change, including physical activity, merits continued investigation.

Although a relatively large body of research exists on advice and counselling by doctors for other health behaviours, such as smoking, relatively little systematic research has been conducted to date on physical activity promotion in primary care. The studies that have been undertaken have taken advantage of a growing body of knowledge, underscoring the utility of applying empirically supported behavioural strategies in facilitating physical activity change. Such behavioural strategies, derived primarily from social cognitive theory and its derivatives, include: identifying specific practical physical activity goals tailored to the patient's needs and circumstances; structuring initial patient expectations so that they are realistic; identifying those benefits related to becoming more physically active that are most germane to the patient's own health status; encouraging the patient to keep track of his or her own physical activity patterns through simple self